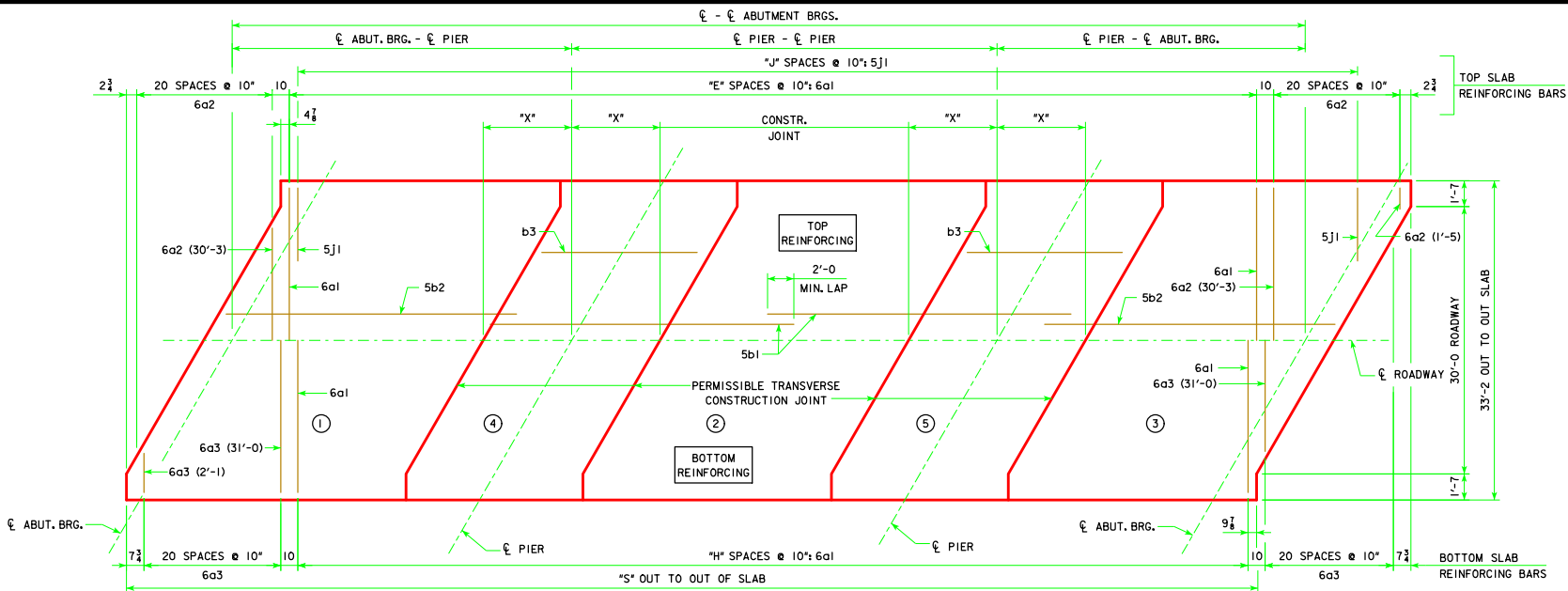


REVISED 07-2015 - CHANGED CONCRETE PLACEMENT NOTE TO ACCOUNT FOR THE POSSIBLE ADDITION OF A RETARDING ADMIXTURE TO THE CONCRETE.



SLAB LAYOUT
(LEFT AHEAD SKEW SHOWN, RIGHT AHEAD SKEW SIMILAR)

ESTIMATED QUANTITIES (SUPERSTRUCTURE PLUS INTEGRAL ABUTMENTS)		℄-℄ ABUT. BRG.	138'-10	151'-4	163'-10	176'-4	188'-10	201'-4	213'-10	226'-4	243'-0
STRUCTURAL CONCRETE SUPERSTRUCTURE	WITH BARRIER RAIL	C.Y.	178.7	189.2	208.3	219.0	229.9	252.2	262.9	274.4	289.2
(INCLUDES ABUTMENT WINGS, PAV. BLOCKS)	WITH OPEN RAIL	C.Y.	181.2	191.9	211.3	222.2	233.3	255.7	266.6	278.3	293.4
STRUCTURAL CONCRETE ABUTMENTS (w/ WOOD PILES) ***	C.Y.	29.4	29.4	29.3	29.3	29.2	-----	-----	-----	-----	-----
STRUCTURAL CONCRETE ABUTMENTS (w/ STEEL H PILES) ***	C.Y.	30.8	30.8	30.8	30.8	30.8	38.4	38.4	38.4	38.4	38.4
PRETENSIONED PRESTRESSED CONCRETE BEAM, CENTER SPAN	NO.	5-A50	5-A55	5-B59	5-B63	5-B67	5-C71	5-C75	5-C80	5-C80	-----
PRETENSIONED PRESTRESSED CONCRETE BEAM, END SPAN	NO.	10-A42	10-A46	10-B50	10-B55	10-B59	10-C63	10-C67	10-C71	10-C80	-----
CONCRETE RAIL (BARRIER OR OPEN)	L.F.	312.6	337.6	362.6	387.6	412.6	456.7	481.7	506.7	540.0	-----
STRUCTURAL STEEL (w/ PILE BENT PIERS & DRAINS)	LB.	3985	3985	4073	4073	4073	4077	4077	4077	4077	-----
STRUCTURAL STEEL (w/ PILE BENT PIERS & NO DRAINS)	LB.	3305	3305	3305	3305	3305	3229	3229	3229	3229	-----
STRUCTURAL STEEL (w/ TEE PIERS & DRAINS)	LB.	4881	4881	4969	4969	4969	5135	5135	5135	5135	-----
STRUCTURAL STEEL (w/ TEE PIERS & NO DRAINS)	LB.	4201	4201	4201	4201	4201	4287	4287	4287	4287	-----
REINFORCING STEEL (w/ WOOD PILES & BARRIER RAIL)	LB.	50,727	54,225	57,905	61,770	65,300	-----	-----	-----	-----	-----
REINFORCING STEEL (w/ WOOD PILES & OPEN RAIL)	LB.	51,392	54,846	58,673	62,714	66,174	-----	-----	-----	-----	-----
REINFORCING STEEL (w/ STEEL H PILES & BARRIER RAIL)	LB.	50,735	54,233	57,805	61,670	65,091	71,558	75,702	79,122	83,596	-----
REINFORCING STEEL (w/ STEEL H PILES & OPEN RAIL)	LB.	51,400	54,854	58,573	62,614	65,965	72,189	77,242	80,859	85,379	-----
NO. OF WOOD PILES, TREATED FOR TWO ABUTMENTS	NO.	24	24	26	26	28	-----	-----	-----	-----	-----
NO. OF STEEL H-PILES FOR TWO ABUTMENTS (HP 10 x 57)	NO.	12	12	12	12	12	18	18	18	18	-----
PREBORED HOLES (w/ WOOD PILES)	L.F.	240	240	260	260	280	-----	-----	-----	-----	-----
PREBORED HOLES (w/ STEEL H-PILES)	L.F.	120	120	120	120	120	180	180	180	180	-----

CONCRETE PLACEMENT QUANT.		℄-℄ ABUT. BRG.	138'-10	151'-4	163'-10	176'-4	188'-10	201'-4	213'-10	226'-4	243'-0
SLAB INCLUDING HAUNCH, ABUT. DIAPHRAGM, & WINGWALLS**	WITH BARRIER RAIL	C.Y.	95.2	101.2	112.2	118.4	124.6	139.4	145.8	152.6	167.4
	WITH OPEN RAIL	C.Y.	96.5	102.6	113.8	120.1	126.4	141.3	147.8	154.7	169.8
SLAB INCLUDING HAUNCH, SECTION 2	WITH BARRIER RAIL	C.Y.	33.5	36.2	38.9	41.6	44.1	47.0	49.7	52.4	52.4
	WITH OPEN RAIL	C.Y.	34.2	37.0	39.7	42.5	45.1	48.0	50.7	53.5	53.5
SLAB INCLUDING HAUNCH & PIER DIAPHRAGM, SECTIONS 4 & 5	WITH BARRIER RAIL	C.Y.	40.0	41.8	46.8	48.6	50.8	54.6	56.2	58.2	58.2
	WITH OPEN RAIL	C.Y.	40.5	42.3	47.4	49.2	51.4	55.2	56.9	58.9	58.9
PAVING BLOCKS	C.Y.	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
ABUTMENT WINGS	C.Y.	7.2	7.2	7.6	7.6	7.6	8.4	8.4	8.4	8.4	8.4
ABUTMENT FOOTINGS (w/ WOOD PILES) ***	C.Y.	29.4	29.4	29.3	29.3	29.2	-----	-----	-----	-----	-----
ABUTMENT FOOTINGS (w/ STEEL H PILES) ***	C.Y.	30.8	30.8	30.8	30.8	30.8	38.4	38.4	38.4	38.4	38.4

GENERAL DATA		℄-℄ ABUT. BRG.	138'-10	151'-4	163'-10	176'-4	188'-10	201'-4	213'-10	226'-4	243'-0
VERTICAL	TOP OF SLAB TO ABUT. CONSTR. JT. AT C.L. ABUT. BRG.	"U"	3'-7 ¹¹ / ₁₆	3'-7 ⁷ / ₈	4'-2 ¹³ / ₁₆	4'-2 ¹³ / ₁₆	4'-3	4'-8 ¹ / ₂	4'-8 ¹ / ₂	4'-9	4'-9 ¹ / ₂
CURVE	TOP OF SLAB TO PIER TOP AT C.L. PIER*	"U"	3'-6 ¹ / ₈	3'-6 ¹ / ₈	4'-1 ¹ / ₂	4'-1 ¹ / ₂	4'-3 ¹ / ₂	4'-7 ¹ / ₂	4'-7 ¹ / ₂	4'-7 ¹ / ₂	4'-7 ¹ / ₂
STRAIGHT	TOP OF SLAB TO ABUT. CONSTR. JT. AT C.L. ABUT. BRG.	"U"	3'-8 ¹ / ₂	3'-7 ⁷ / ₈	4'-2 ¹³ / ₁₆	4'-2 ¹³ / ₁₆	4'-3 ¹ / ₂	4'-8 ¹ / ₂	4'-8 ¹ / ₂	4'-9 ¹ / ₂	4'-10
GRADE	TOP OF SLAB TO PIER TOP AT C.L. PIER*	"U"	3'-6 ¹ / ₈	3'-6 ¹ / ₈	4'-1 ¹ / ₂	4'-1 ¹ / ₂	4'-2 ¹³ / ₁₆	4'-7 ¹ / ₂	4'-7 ¹ / ₂	4'-8 ¹ / ₂	4'-8 ¹ / ₂
D.L. PIER REACTION (D.L. + F.W.S.) SERVICE LOADS	KIPS		357.3	385.4	440.8	470.4	500.2	599.2	632.4	666.1	698.8
L.L. PIER REACTION (HL93) NO IMPACT SERVICE LOADS	KIPS		207.6	215.3	222.7	229.9	237.0	244.0	253.2	268.2	284.4
NO. OF SPACES FOR 6a1 BARS (TOP)	"E"		149	164	179	194	209	224	239	254	274
NO. OF SPACES FOR 6a1 BARS (BOTTOM)	"H"		148	163	178	193	208	223	238	253	273
NO. OF SPACES FOR 5j1 BARS (TOP)	"J"		166	181	196	211	226	241	256	271	291
OUT TO OUT OF SLAB	"S"		142'-3 ¹ / ₂	154'-9 ¹ / ₂	167'-3 ¹ / ₂	179'-9 ¹ / ₂	192'-3 ¹ / ₂	204'-9 ¹ / ₂	217'-3 ¹ / ₂	229'-9 ¹ / ₂	246'-5 ¹ / ₂
SLAB TRANSVERSE CONSTR. JT. DISTANCE FROM C.L. PIER	"X"		6'-7	7'-1	7'-7	8'-1	8'-8	9'-2	9'-8	10'-2	10'-2

NOTE: CONCRETE DECK SHALL BE PLACED IN SECTIONS AND SEQUENCES INDICATED. ALTERNATE PROCEDURES FOR PLACING DECK CONCRETE MAY BE SUBMITTED FOR APPROVAL TOGETHER WITH A STATEMENT OF THE PROPOSED METHOD AND EVIDENCE THAT THE CONTRACTOR POSSESSES THE NECESSARY EQUIPMENT AND FACILITIES TO ACCOMPLISH THE REQUIRED RESULTS. FOR APPROVED ALTERNATE PROCEDURES THE ENGINEER SHALL DETERMINE IF A RETARDING ADMIXTURE IS REQUIRED TO MAINTAIN PLASTICITY OF THE CONCRETE DECK DURING PLACEMENT.

* VALUES SHOWN ARE FOR FIXED PIERS ONLY AND ALLOW FOR 1/8 INCH DEFLECTION OF THE 1 INCH NEOPRENE BEARING PAD. AT EXPANSION PIER LOCATIONS ADD 3/8 INCHES TO "U" VALUES SHOWN.

** WINGWALLS APPLY ONLY TO BRIDGES USING "C" BEAMS.

*** SEE SHEET H30-24-06 FOR ADDITIONAL CONCRETE REQUIRED IN ABUTMENT FOOTINGS.

LATEST REVISION DATE

07-15

APPROVED BY BRIDGE ENGINEER

Thomas E. McQuillan

STANDARD DESIGN - 30' ROADWAY, THREE SPAN BRIDGES

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

DECEMBER, 2006

SUPERSTRUCTURE DETAILS

30° SKEW

H30-22-06